Feerel Hostony. 1/21/05. Jh. (45pp.)

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|----------|-------|--|--|---------------------|---------|---------------------------------------|
| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
| L1 | 3 | "489187".ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/01/21 08:19 |
| L2 | 2 | "6143362".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/01/21 08:27 |
| L3 | 11257 | ((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/30\$1) or (257/310) or (257/311) or (257/312) or (257/313) or (257/734) or (257/754) or (257/755) or (257/757) or (257/758) or (257/763) or (257/764) or (257/768) or (257/770) or (257/768) or (257/770) or (257/906)).CCLS. (titanium near2 zinc near12 alloy) same ((contact adj (opening or | US-PGPUB; USPAT US-PGPUB; USPAT; | OR OR | OFF | 2005/01/21 09:16 |
| L5 | 4 | hole)) or via) and 3 (titanium near2 zinc near12 alloy) same ((contact adj (opening or hole)) or via) and 3 and silicide | EPO; JPO; DERWENT; IBM_TDB US-PGPUB; USPAT; EPO; JPO; DERWENT; | OR | ON | 2005/01/21 08:34 |
| L6 | 4 | (titanium near2 zinc near12 alloy) same ((contact adj (opening or hole)) or via) and 3 and (BPSG boro adj phosphosilicate borophosphosilicate boro-phosphosilicate) | IBM_TDB US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/01/21 08:38 |
| L7 | 4 | (titanium near2 zinc near12 alloy) same ((contact adj (opening or hole)) or via) and 3 and step adj coverage | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/01/21 08:42 |
| L8 | 7 | (titanium near2 zinc near12 alloy) same ((contact adj (opening or hole)) or via) and step adj coverage and memory and substrate | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/01/21 08:42 |

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|-----|-----|--|------------|----|-----|------------------|
| L10 | 76 | (US-20010006240-\$ or | US-PGPUB; | OR | OFF | 2005/01/21 09:00 |
| | | US-20010022369-\$ or | USPAT; | | | |
| | | US-20010038115-\$ or | JPO; | | | |
| 1 | | US-20010042505-\$ or | DERWENT | | | |
| | | US-20010052610-\$ or | | | | İ |
| | | US-20020000263-\$ or | | | | |
| | | US-20020000662-\$ or | | | | ŀ |
| | | US-20020006525-\$ or | | • | | |
| | | , | | | | |
| | | US-20020006716-\$ or | | | | |
| | | US-20020017724-\$ or | | 1 | | |
| | | US-20020043678-\$ or | | | | |
| | | US-20020047153-\$ or | | | | |
| | | US-20020053691-\$ or | | 1 | | |
| 1 | } | US-20020056862-\$ or | | | | |
| | | US-20020060331-\$ or | | | | |
| | | US-20030001183-\$ or | | İ | | |
| | | US-20030030144-\$ or | İ | | | |
| | | US-20030119246-\$).did. or | | 1 | | |
| | | (US-4557943-\$ or US-4782380-\$ or | 1 | | | |
| | | US-4985750-\$ or US-4994410-\$ or | | | | |
| 1 | | US-5229643-\$ or US-5233217-\$ or | 1 | | | |
| | Ĭ | US-5239196-\$ or US-5355020-\$ or | | | ĺ | |
| | | , | | | | |
| | | US-5386135-\$ or US-5401674-\$ or | | | | |
| | | US-5444018-\$ or US-5463234-\$ or | İ | | | |
| | · · | US-5475240-\$ or US-5523626-\$ or | | | | |
| | | US-5534716-\$ or US-5576928-\$ or | | | | |
| | 1 | US-5644166-\$ or US-5725739-\$ or | | | | |
| | | US-5773890-\$ or US-5811851-\$ or | | | : | |
| | | US-5846881-\$ or US-5883781-\$ or | | | | |
| | | US-5924012-\$ or US-5970309-\$ or | | | | |
| | ĺ | US-6016012-\$ or US-6031288-\$). | | | | |
| | | did. or (US-6043526-\$ or | | | | |
| | | US-6051286-\$ or US-6087727-\$ or | | | | |
| | | US-6140230-\$ or US-6143362-\$ or | | | | |
| | İ | US-6143649-\$ or US-6153490-\$ or | | | | |
| | | US-6198151-\$ or US-6208033-\$ or | | | | |
| | | US-6217721-\$ or US-6221770-\$ or | | | | • |
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|] | | US-6255151-\$ or US-6255216-\$ or | | | | • |
| | | , | | | | |
| | | US-6284316-\$ or US-6294469-\$ or | | | | |
| | | US-6320213-\$ or US-6376368-\$ or | | | | |
| | | US-6429493-\$ or US-6433434-\$ or | | | Ì | |
| | | US-6552431-\$ or US-6570252-\$ or | | | | |
| | | US-6605533-\$ or US-6650017-\$ or | | | | |
| | | US-6830820-\$ or US-6830838-\$). | | | | ĺ |
| | | did. or (JP-04196419-\$ or | | | | |
| | | JP-08176823-\$).did. or | | | | |
| | | (JP-63284857-\$ or JP-04196419-\$ | | | | |
| | į | or EP-798777-\$).did. | | | | |
| | 4.4 | ស្រាស្ត្រសម្រាស់ ស្រាស់ כ הכטיים | 00 | | 2005/04/24 22 |
| L11 | 14 | 10 and sandhu.in. | US-PGPUB; | OR | OFF | 2005/01/21 09:13 |
| | | | USPAT; | | | |
| | | | JPO; | | | |
| | | **** | DERWENT | | | * |
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|-----|-------------|--|--|-----------|-----|------------------|
| L12 | 351 | (decrease decreasing reduce reduction) near3 contact adj resistance.ti,ab,clm. and "257"/\$8. ccls. | US-PGPUB; USPAT; JPO; DERWENT | OR | OFF | 2005/01/21 09:08 |
| L13 | 131 | (decrease decreasing reduce reduction) near3 contact adj | USPAT | OR | OFF | 2005/01/21 09:08 |
| | | resistance.ti,ab,clm. and "257"/\$8. ccls. | | | | |
| L14 | 164 | seed adj layer and (chemical adj vapor adj deposition cvd) and titanium.ti,ab,clm. and contact adj resistance | US-PGPUB; USPAT; JPO; DERWENT | OR | OFF | 2005/01/21 09:14 |
| L15 | 11788 | ((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/30\$1) or (257/310) or (257/311) or | US-PGPUB; USPAT | OR | OFF | 2005/01/21 09:17 |
| | | (257/312) or (257/313) or | 15 | | | |
| | | (257/734) or (257/750) or | | | | |
| | | (257/754) or (257/755) or | Company and the company of the compa | | | |
| | | (257/757) or (257/758) or | | | | |
| | | (257/763) or (257/764) or | | | , | |
| | .* * | (257/768) or (257/770) or (257/906)).CCLS. | | | | |
| | 18 2.01 | | | | | |
| L16 | 531 | 15 not 3 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/01/21 09:17 |
| L17 | 0 | 16 and seed adj layer and cvd and | US-PGPUB; | OR | OFF | 2005/01/21 09:18 |
| | | zinc near3 titanium | USPAT; | 1 4 1 1 1 | | |
| | | | EPO; JPO; | | | |
| | | | DERWENT; IBM_TDB | | - 1 | |
| | | | | | | |
| LIB | U | 16 and CVd and zinc near3 titanium | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/01/21 09:18 |
| 1 - | | | 1 440.744 | 1 | 1. | |
| L19 | 1 | 16 and zinc near3 titanium | US-PGPUB; | OR | OFF | 2005/01/21 09:18 |
| L19 | 1 | 16 and zinc near3 titanium | USPAT; | OR | OFF | 2005/01/21 09:18 |
| L19 | 1 | 16 and zinc near3 titanium | USPAT; EPO; JPO; | OR | OFF | 2005/01/21 09:18 |
| L19 | 1 | 16 and zinc near3 titanium | USPAT; | OR | OFF | 2005/01/21 09:18 |

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|----|-----|-------------------------------------|-----------|----|-------------|------------------|
| S1 | 73 | (US-6284316-\$ or US-6143362-\$ or | US-PGPUB; | OR | OFF | 2004/09/12 12:10 |
| | | US-6221770-\$ or US-5773890-\$ or | USPAT; | | | |
| | | US-5463234-\$ or US-5475240-\$ or | JPO; | | | |
| | | US-6031288-\$ or US-5644166-\$ or | DERWENT | | | |
| | | US-6217721-\$ or US-6043526-\$ or | | | | |
| | | US-6429493-\$ or US-6087727-\$ or | | | | |
| | | US-5444018-\$ or US-4994410-\$ or | | | | |
| | | US-6650017-\$ or US-4782380-\$ or | | | | |
| | | · | | | | |
| | | US-5239196-\$ or US-6433434-\$ or | | | } | |
| | | US-5811851-\$ or US-6198151-\$ or | | | | |
| | | US-5576928-\$ or US-4557943-\$ or | | | | |
| | | US-5523626-\$ or US-5924012-\$ or | | | | |
| | | US-6153490-\$ or US-6570252-\$). | | | | |
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| | | US-4985750-\$ or US-5401674-\$ or | | | | |
| 1 | | US-6051286-\$ or US-5883781-\$ or | | | | |
| | | US-6255151-\$ or US-5386135-\$ or | | | | |
| | | US-6252281-\$ or US-6255216-\$ or | | | | |
| | | US-6208033-\$ or US-5534716-\$ or | | | 1 | |
| | 1 | US-5355020-\$ or US-5229643-\$ or | | | | |
| Ī | İ | US-6143649-\$ or US-6016012-\$ or | | | | |
| | | US-5725739-\$ or US-6320213-\$ or | | | | |
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| | | US-6140230-\$ or US-5970309-\$ or | | | | |
| | | US-5846881-\$).did. or | | | | |
| | | (US-20020006525-\$ or | | | | |
| | 4 | US-20020000662-\$ or | | | į. | |
| | | US-20020000263-\$ or | | | | |
| | | US-20020017724-\$ or | | | | |
| | | US-20020047153-\$ or | | | | |
| | | US-20030030144-\$ or | | | | |
| | | US-20030001183-\$ or | | | | |
| | | US-20020056862-\$ or | | | | |
| | | US-20010038115-\$ or | | | | |
| | | US-20010038113-3 07 | | | | |
| | | US-20030119246-\$ or | | | | |
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| | | US-20020053691-\$ or | | | | |
| | | US-20010022369-\$ or | | | | |
| | | US-20020006716-\$ or | | | | |
| | | US-20020060331-\$ or | | | | |
| | | US-20010006240-\$ or | | | | |
| | | US-20010052610-\$ or | | | | |
| | | US-20020043678-\$).did. or | | | | |
| | | (JP-08176823-\$ or JP-04196419-\$). | | | | |
| | | did. or (EP-798777-\$ or | | | | |
| | | JP-63284857-\$ or JP-04196419-\$). | | | | |
| | | did. | | | | |
| S2 | . 1 | S1 and anjum.in. | US-PGPUB; | OR | OFF | 2004/09/12 12:11 |
| - | · | | USPAT; | | | |
| | | | JPO; | | | |
| | ٠ | | DERWENT | | | |
| | | | v. | | , ;- 0== | |
| S3 | 1 | step adj coverage.clm. and contact | US-PGPUB; | OR | OFF | 2004/09/12 12:12 |
| | | adj hole.clm. and titanium and | USPAT; | | | |
| | | germanium | JPO; | | | |
| | | | DERWENT | | | |
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| S4 | 5 | "941123".ap. | US-PGPUB; | OR | OFF | 2004/09/12 12:12 |
|----|------|--|---|----|-----|------------------|
| | | • | USPAT; JPO; DERWENT | | | |
| S5 | 2 | ("6143362").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/01/21 06:19 |
| S6 | 2 | ("6284316").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2002/05/26 19:11 |
| S7 | 1962 | (257/296):CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2002/05/26 19:31 |
| S8 | 0 | ((257/296).CCLS.) and memory.ti, ab. and control adj circuit and (i/o or input or output or input/output) adj circuit and (active adj region or active adj layer or channel) and titanium near5 (zinc or cadmium or mercury or aluminum or gallium or indium or tin or silicon or germanium or lead or arsenic or antimony or zn or cd or hg or al or ga or in or sn or si or ge or pb or ar or sb) and (tisi or titanium adj silicide) and (contact adj opening or via) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/26 19:46 |
| S9 | 2 | ((257/296).CCLS.) and memory.ti, ab. and control adj circuit and (i/o or input or output or input/output) adj circuit and (active adj region or active adj layer or channel) and titanium near5 (zinc or cadmium or mercury or aluminum or gallium or indium or tin or silicon or germanium or lead or arsenic or | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/26 19:52 |
| | | antimony or zn or cd or hg or al or ga or in or sn or si or ge or pb or ar or sb) and (tisi or titanium adj silicide) | | · | | |

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|-----|---|---|--|---|---------|----|---------------------------|
| S10 | | 2 | ((257/296).CCLS.) and memory.ti, ab. and control adj circuit and (i/o or input or output or input/output) adj circuit and (active adj region or active adj layer or channel) and titanium near5 (zinc or cadmium or mercury or aluminum or gallium or indium or tin or silicon or germanium or lead or arsenic or antimony or zn or cd or hg or al or ga or in or sn or si or ge or pb or ar or sb) and (tisi\$1 or titanium adj silicide) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/26 19:52 |
| S11 | | 2 | ((257/296).CCLS.) and memory.ti, | US-PGPUB; | OR | ON | 2002/05/26 19:53 |
| | | | ab. and control adj circuit and (i/o or input or output or input/output) | USPAT; EPO; JPO; | | | |
| | | | adj circuit and (active adj region or | DERWENT; | | | |
| | | | active adj layer or channel) and titanium near5 (zinc or cadmium or | IBM_TDB | | | |
| | | | mercury or aluminum or gallium or indium or tin or silicon or | | | | |
| | | | germanium or lead or arsenic or | | | | |
| | 7 | | antimony or zn or cd or hg or al or ga or in or sn or si or ge or pb or ar | | | | 1 (\$\frac{1}{2} \tau \) |
| | | | or sb) and ("tisi.sub.2" or titanium | | | | |
| | | | adj silicide) | | | | |
| S12 | | 4 | ((257/296).CCLS.) and memory.ti, ab. and control adj circuit and (i/o or input or output or input/output) adj circuit and (active adj region or active adj layer or channel) and titanium near5 (zinc or cadmium or mercury or aluminum or gallium or indium or tin or silicon or germanium or lead or arsenic or antimony or zn or cd or hg or al or ga or in or sn or si or ge or pb or ar or sb) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/26 19:55 |
| S13 | | 0 | ((257/296).CCLS.) and memory.ti, ab. and control adj circuit and (i/o | US-PGPUB; | OR | ON | 2002/05/26 19:55 |
| | | | or input or output or input/output) | USPAT; EPO; JPO; | * * * i | a. | |
| | | | adj circuit and (active adj region or active adj layer or channel) and | DERWENT; IBM_TDB | | | |
| | | | titanium adj alloy | דחייו−ו חם | | | |
| S14 | | 5 | ((257/296).CCLS.) and memory.ti, ab. and control adj circuit and (i/o or input or output or input/output) adj circuit and (active adj region or active adj layer or channel) and titanium | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/26 20:22 |

| S15 | 0 | ((257/296).CCLS.) and memory.ti, ab. and control adj circuit and (i/o or input or output or input/output) adj circuit and trench adj gate and titanium adj silicide and titanium near3 alloy | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/26 20:28 |
|------------|-----|---|---|----|-----|------------------|
| S16 | 14 | gate adj insulat\$3 adj layer near12 (titanium adj silicide or "tisi.sub.2") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/26 20:34 |
| S17 | 2 | jp-63284857\$-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/26 20:34 |
| S18 | 563 | ((257/296).CCLS.) and contact adj hole | US-PGPUB; *USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/26 20:47 |
| S19 | 65 | ((257/296).CCLS.) and contact adj hole and (titanium adj silicide or "tisi.sub.2") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/26 20:48 |
| S20 | 30 | ((257/296) CCLS.) and contact adj hole and (titanium adj silicide or "tisi.sub.2") and (channel or active adj (layer or region)) and titanium adj (silicide or alloy) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/26 20:49 |
| S21 | 2 | ("6252281").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2002/05/27 12:06 |
| S22 | 43 | (("3900312") or ("4340617") or ("4343870") or ("4359490") or ("4713258") or ("4721631") or ("4751101") or ("4868005") or ("4876112") or ("4884123") or ("4923717") or ("4957777") or ("4971655")).PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2002/05/27 12:08 |
| S23 | 13 | (("3900312") or ("4340617") or ("4343870") or ("4359490") or ("4713258") or ("4721631") or ("4751101") or ("4868005") or ("4876112") or ("4884123") or ("4923717") or ("4957777") or ("4971655")).PN. | USPAT; USOCR | OR | OFF | 2002/05/27 12:10 |

| S24 | 28 | (("5005519") or ("5015330") or ("5022905") or ("5032233") or ("5049975") or ("5124780") or ("5136362") or ("5147819") or ("5173327") or ("5192589") or ("5196360") or ("5202579") or ("5227331") or ("5227334") or ("5232873") or ("5240739") or ("5246881") or ("5252518") or ("5254499") or ("5258096") or ("5273783") or ("5275715") or ("5278100") or ("5306951") or | USPAT; USOCR | OR | OFF | 2002/05/27 12:20 |
|-----|----|--|---|----|-----|------------------|
| S25 | 31 | ("5320880") or ("5341016") or ("5344792") or ("5374591")).PN. (("5376405") or ("5381302") or ("5384284") or ("5391410") or ("5393564") or ("5399379") or | USPAT; USOCR | OR | OFF | 2002/05/27 12:27 |
| | | ("5416045") or ("5425392") or ("5459353") or ("5459762") or ("5506166") or ("5508066") or ("5567243") or ("5571572") or ("5575708") or ("5595784") or ("5607722") or ("5633200") or ("5641545") or ("5644166") or | | | | |
| | | ("5693557") or ("5747116") or ("5773890") or ("5828131") or ("5834371") or ("5838052") or ("5956595") or ("5973402") or ("6031288") or ("6120844") or ("6143362")).PN. | | | | |
| S26 | 0 | ep-0798777\$-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/27 12:28 |
| S27 | 2 | ep-798777\$-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/27 12:32 |
| S28 | 2 | jp-08176823\$-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/27 12:37 |
| S29 | 1 | jp-07092000\$-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/27 12:38 |

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|-----|---------|----|--|---|----|-------|------------------|
| S30 | | 1 | "7-092000" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/27 13:04 |
| S31 | | 0 | ("titaniumadjalloynear5titaniumadjsi licide").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; | OR | OFF | 2002/05/27 13:05 |
| | | | | IBM_TDB | | | 2000/05/27 42 05 |
| S32 | | 23 | titanium adj alloy near5 titanium adj silicide | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/27 13:05 |
| S33 | 1 | 19 | titanium adj alloy near3 titanium adj silicide | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/27 13:18 |
| S34 | 1 | 18 | memory adj2 array and control adj circuit and (input/output or i/o) adj circuit and (titanium adj silicide or titanium-silicon) and titanium near2 (zinc or zn or cadmium or cd or mercury or hg or aluminum or al or aluminium or ga or gallium or indium or tin or sn or ge or germanium or pb or ar or arsenic or antimony or sb) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/27 13:24 |
| S35 | 3 | 32 | memory adj2 array and control adj circuit and (input/output or i/o) adj circuit and (titanium adj silicide or titanium-silicon) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/27 13:29 |
| S36 | 2 | 28 | memory adj2 array and control adj circuit and (input/output or i/o) adj circuit and (titanium adj silicide or titanium-silicon) and contact adj hole | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/27 15:09 |
| S37 | | 7 | ("5239196").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; | OR | OFF | 2002/05/27 17:25 |
| | *** *** | | | DERWENT; IBM_TDB | | 4 | |
| S38 | | 0 | ("L3orL4orL5").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2002/05/27 17:25 |

| | r | | 1 | T | T | T |
|-----|--------------|------------------------------------|-----------|----|----|------------------|
| S39 | 72 | ((("3900312") or ("4340617") or | US-PGPUB; | OR | ON | 2002/05/27 17:25 |
| | | ("4343870") or ("4359490") or | USPAT; | | | |
| ļ | | ("4713258") or ("4721631") or | EPO; JPO; | | | |
| 1 | | ("4751101") or ("4868005") or | DERWENT; | | | |
| | | ("4876112") or ("4884123") or | IBM_TDB | | | |
| | | ("4923717") or ("4957777") or | |] | | |
| İ | | ("4971655")).PN.) or ((("5005519") | | | | |
| | | or ("5015330") or ("5022905") or | | | | |
| | 1 | ("5032233") or ("5049975") or | | | | |
| | | ("5124780") or ("5136362") or | | İ | | İ |
| | | ("5147819") or ("5173327") or | | | | |
| | | ("5192589") or ("5196360") or | | ĺ | | ! |
| | | ("5202579") or ("5227331") or | | | | |
| | | ("5227334") or ("5232873") or | | | , | |
| | | ("5240739") or ("5246881") or | | | | ļ |
| | | ("5252518") or ("5254499") or | | | | |
| | | ("5258096") or ("5273783") or | | | | |
| ļ | | ("5275715") or ("5278100") or | | | | |
| | | ("5306951") or ("5320880") or | | | | |
| | | ("5341016") or ("5344792") or | | | | |
| | | ("5374591")).PN.) or ((("5376405") | | | | |
| | | or ("5381302") or ("5384284") or | | | | |
| | | ("5391410") or ("5393564") or | | | | |
| | | ("5399379") or ("5416045") or | | | | |
| | | ("5425392") or ("5459353") or | | | | |
| | | ("5459762") or ("5506166") or | | | | |
| | | ("5508066") or ("5567243") or | | | | |
| | | ("5571572") or ("5575708") or | | | | |
| | | ("5595784") or ("5607722") or | | | | |
| | | ("5633200") or ("5641545") or | | | | |
| | | ("5644166") or ("5693557") or | | | | |
| | | ("5747116") or ("5773890") or | | | | |
| | | ("5828131") or ("5834371") or | 1 | | | |
| | | ("5838052") or ("5956595") or | | | | |
| | | ("5973402") or ("6031288") or | | | | |
| | | ("6120844") or ("6143362")).PN.) | | | | |

| S40 | 23 | (((("3900312") or ("4340617") or | US-PGPUB; | OR | ON | 2002/05/27 17:27 |
|-----|----|------------------------------------|-----------|----|----|------------------|
| 0.0 | | ("4343870") or ("4359490") or | USPAT; | | | |
| | | ("4713258") or ("4721631") or | EPO; JPO; | | İ | |
| | | ("4751101") or ("4868005") or | DERWENT; | | | |
| | | ("4876112") or ("4884123") or | IBM TDB |] | | |
| | | ("4923717") or ("4957777") or | _ | 1 | Ì | |
| | | ("4971655")).PN.) or ((("5005519") | | | | |
| | | or ("5015330") or ("5022905") or | | | | |
| | | ("5032233") or ("5049975") or | | | |] |
| | | ("5124780") or ("5136362") or | | | | |
| | | ("5147819") or ("5173327") or | | | | |
| | | ("5192589") or ("5196360") or | | | | |
| | | ("5202579") or ("5227331") or | | | | |
| | | ("5227334") or ("5232873") or | | | | |
| | | ("5240739") or ("5246881") or | | | | |
| | | ("5252518") or ("5254499") or | | | | |
| | | ("5258096") or ("5273783") or | | | | |
| | | ("5275715") or ("5278100") or | | | | |
| | | ("5306951") or ("5320880") or | | | | |
| | | ("5341016") or ("5344792") or | | | | |
| lli | | ("5374591")).PN.) or ((("5376405") | | | | |
| | | or ("5381302") or ("5384284") or | | | | |
| | | ("5391410") or ("5393564") or | | | | |
| | | ("5399379") or ("5416045") or | | | | |
| | | ("5425392") or ("5459353") or | | | | |
| [] | | ("5459762") or ("5506166") or | | | | |
| | | ("5508066") or ("5567243") or | | | | |
| | | ("5571572") or ("5575708") or | | | | |
| | İ | ("5595784") or ("5607722") or | | | | |
| | | ("5633200") or ("5641545") or | | | | İ |
| | | ("5644166") or ("5693557") or | | | | |
| | | ("5747116") or ("5773890") or | | | | |
| | | ("5828131") or ("5834371") or | | | | |
| | | ("5838052") or ("5956595") or | | | | |
| | | ("5973402") or ("6031288") or | | | | |
| | | ("6120844") or ("6143362")).PN.)) | | | | |
| | | and aspect adj ratio | | | | |

| S41 | 0 | (((("3900312") or ("4340617") or | US-PGPUB; | OR | ON | 2002/05/27 17:27 |
|-----|---|-------------------------------------|-----------|----|----|------------------|
| | | ("4343870") or ("4359490") or | USPAT; | | | |
| | | ("4713258") or ("4721631") or | EPO; JPO; | | | |
| | | ("4751101") or ("4868005") or | DERWENT; | | | |
| | | ("4876112") or ("4884123") or | IBM_TDB | | | |
| | | ("4923717") or ("4957777") or | | | | |
| | | ("4971655")).PN.) or ((("5005519") | | | | |
| | | or ("5015330") or ("5022905") or | | | | |
| | | ("5032233") or ("5049975") or | | | | |
| | | ("5124780") or ("5136362") or | | | | |
| | | ("5147819") or ("5173327") or | | | | |
| | | ("5192589") or ("5196360") or | | İ | | |
| | i | ("5202579") or ("5227331") or | | | | |
| | | ("5227334") or ("5232873") or | | | } | |
| | | ("5240739") or ("5246881") or | | | İ | |
| | | ("5252518") or ("5254499") or | | | | |
| | | ("5258096") or ("5273783") or | | | | |
| | | ("5275715") or ("5278100") or | | | | |
| | | ("5306951") or ("5320880") or | | | | |
| | | ("5341016") or ("5344792") or | | | | |
| İ | | ("5374591")).PN.) or ((("5376405") | | | | |
| | | or ("5381302") or ("5384284") or | | | | |
| | | ("5391410") or ("5393564") or | | | | |
| | | ("5399379") or ("5416045") or | | | | |
| | | ("5425392") or ("5459353") or | | | | |
| | | ("5459762") or ("5506166") or | | | | |
| | | ("5508066") or ("5567243") or | | | | |
| | | ("5571572") or ("5575708") or | | | | |
| | | ("5595784") or ("5607722") or | | | | |
| ! | | ("5633200") or ("5641545") or | | | | |
| | | ("5644166") or ("5693557") or | | | | |
| | | ("5747116") or ("5773890") or | | | | |
| | | ("5828131") or ("5834371") or | 1 | | | |
| ĺ | | ("5838052") or ("5956595") or | İ | | | |
| | | ("5973402") or ("6031288") or | | | | |
| | | ("6120844") or ("6143362")).PN.)) | | | | |
| İ | | and aspect adj ratio and memory.ti, | | | | |
| | | ab. | | | | |
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| | | | | т | -r | |
|-----|--------|--|---|---------------------------------------|------|------------------|
| S42 | 9 | (((("3900312") or ("4340617") or ("4343870") or ("4359490") or ("4713258") or ("4721631") or ("4751101") or ("4868005") or ("4876112") or ("4884123") or ("4923717") or ("4957777") or ("4971655")).PN.) or ((("5005519") or ("5015330") or ("5049975") or ("5032233") or ("5147819") or ("5196360") or ("5192589") or ("5192589") or ("5192589") or ("5227331") or ("5227334") or ("5227334") or ("5227334") or ("5227334") or ("5227334") or ("5252518") or ("5246881") or ("5252518") or ("5273783") or ("5336951") or ("5344792") or ("5341016") or ("53934792") or ("5391410") or ("5393564") or ("5399379") or ("5416045") or ("5399379") or ("5459353") or ("5575708") or ("557572") or ("5575708") or ("5588131") or ("55834371") or ("5633200") or ("5641545") or ("5633200") or ("5641545") or ("5633200") or ("5641545") or ("5633200") or ("5641545") or ("5633200") or ("5641545") or ("5633200") or ("5773890") or ("5838052") or ("5838371") or ("5838052") or ("5838371") or ("5838052") or ("5973402") or ("5838385") or ("5973402") or ("5838352") or ("5973402") or ("5838352") or ("5973402") or ("5838357") or ("5973402") or ("6143362")).PN.)) and aspect adj ratio same (connection or contact) adj hole | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/27 18:15 |
| S43 | 12 | aspect adj ratio same (connection | US-PGPUB; | OR | ON | 2002/05/27 20:44 |
| | | or contact) adj hole and titanium | USPAT; | | _·,• | 00_,00,27 20111 |
| | | adj silicide and titanium adj alloy | EPO; JPO; | | | 3 |
| | | | DERWENT; IBM_TDB | e e e e e e e e e e e e e e e e e e e | | |
| S44 | 7 | ("5239196").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2002/05/27 20:44 |
| S45 | 0 | ("((titaniumnear2zincorti-zn)near6in | US-PGPUB; | OR | OFF | 2002/05/27 21:33 |
| | 1. 2 1 | terconnect)").PN. | USPAT; USOCR; | | | |
| | • | | EPO; JPO; | | | |
| | , | | DERWENT; | ı | : | |
| | · ' _ | | IBM_TDB | | | |

| S46 | 0 | ((titanium near2 zinc or ti-zn) near6 interconnect) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/27 21:34 |
|------------|------|--|---|----|----|------------------|
| S47 | O | (titanium near6 zinc near6 alloy) near6 interconnect\$3 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/27 21:34 |
| S48 | 0 | (titanium near2 zinc near12 alloy) and ((contact adj (opening or hole)) or via) and (memory adj (device or array or cell)).ti,ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/28 10:16 |
| S49 | 194 | (titanium near2 zinc near12 alloy) and ((contact adj (opening or hole)) or via) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ΘN | 2002/05/28 10:17 |
| S50 | 9 | (titanium near2 zinc near12 alloy) same ((contact adj (opening or hole)) or via) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/01/21 08:30 |
| S51 | 5090 | zinc same ((contact adj (opening or hole)) or via) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/28 10:21 |
| S52 | 0 | (zinc near6 contact adj (hole or opening)) and memory.ti,ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/28 10:22 |
| S53 | 857 | zinc near6 (contact adj (hole or opening) or via) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/28 10:23 |
| S54 | 5 | (zn or zinc) near6 (contact adj (hole or opening) or via) and memory.ti, ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/28 10:43 |
| S55. | 1120 | (zn or zinc) near6 (contact adj (hole or opening) or via) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/28 10:47 |

| S56 | 47 | (zn or zinc) near6 (contact adj (hole or opening) or via) and gate | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/28 12:05 |
|-----|--------|--|---|----|-----|------------------|
| S57 | 1 | diffusion adj barrier near12 (zinc near2 titanium) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/28 10:59 |
| S58 | 1 | "5976969".PN. | USPAT | OR | OFF | 2002/05/28 11:01 |
| S59 | 1 | "5871805".PN. | USPAT | OR | OFF | 2002/05/28 11:02 |
| S60 | 1 | "5472505".PN. | USPAT | OR | OFF | 2002/05/28 11:02 |
| S61 | 1 | "5472505".PN. | USPAT | OR | OFF | 2002/05/28 11:03 |
| S62 | 66 | (zinc near6 alloy near6 titanium) and (memory.ti,ab. or control adj circuit.ti,ab. or (i/o or input/output or input or output) adj circuit).ti,ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/28 12:04 |
| S63 | 6026 | (zn or zinc) near6 (contact or via) | US-PGPUB; | OR | ON | 2002/05/28 12:06 |
| | | | USPAT; EPO; JPO; | | | |
| | | | DERWENT; IBM_TDB | | | |
| S64 | 71 | ((zn or zinc) near6 (contact or via)) near6 (source or drain) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/28 13:18 |
| S65 | 0 | (interconnect near2 metal near10 zinc) and interconnect\$3.ti,ab. and "257"/\$6.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/28 13:19 |
| S66 | 1 | (interconnect near2 zinc) and interconnect\$3.ti,ab. and "257"/\$6. ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/05/28 13:19 |
| S67 | 22 | (interconnect near12 zinc) and | US-PGPUB; | OR | ON | 2002/05/28 13:19 |
| | * 12 c | interconnect\$3.ti,ab. | USPAT; EPO; JPO; | | | |
| | | | DERWENT; IBM_TDB | | | |
| S68 | 7 | ("5239196").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2002/05/28 15:05 |

| S69 | 2 | ("6217721").PN. | US-PGPUB; | OR | OFF | 2002/05/28 15:05 |
|-----|----|--|---|----|-----|------------------|
| | | | USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | | | |
| S70 | 23 | (US-5463234-\$ or US-6087727-\$ or US-5386135-\$ or US-6255151-\$ or US-6252281-\$ or US-6143362-\$ or US-6217721-\$ or US-6031288-\$ or | US-PGPUB; USPAT; JPO; DERWENT | OR | OFF | 2002/11/23 18:11 |
| | 4 | US-5239196-\$ or US-4557943-\$ or US-5523626-\$ or US-6221770-\$ or US-6284316-\$).did. or (US-20020060331-\$ or | | | | |
| | | US-20020043678-\$ or US-20020006716-\$ or US-20010006240-\$ or US-20010052610-\$ or | | | | |
| | | US-20020053691-\$ or US-20010022369-\$).did. or (JP-08176823-\$).did. or (JP-63284857-\$ or EP-798777-\$). | | | | |
| | | did | | | | |
| S71 | 1 | ("5239196").PN. | USPAT; USOCR | OR | OFF | 2002/11/24 11:41 |
| S72 | 1 | (("5239196").PN.) and "27" and "28" and gate and contact adj (hole or opening) and (titanium adj alloy or titanium adj silicide) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/11/24 11:53 |
| S73 | 1 | ("6217721").PN. | USPAT; USOCR | OR | OFF | 2002/11/24 11:53 |
| S74 | 1 | (("6217721").PN.) and titanium | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/11/24 11:53 |
| S75 | 23 | (US-6255151-\$ or US-6252281-\$ or US-6087727-\$ or US-5463234-\$ or US-6221770-\$ or US-5523626-\$ or US-4557943-\$ or US-6217721-\$ or US-6031288-\$ or US-6217721-\$ or US-5386135-\$ or US-6284316-\$ or US-6143362-\$).did. or (US-20010022369-\$ or US-20020053691-\$ or US-20020060331-\$ or US-20010052610-\$ or US-20010052610-\$ or US-20020043678-\$).did. or (JP-08176823-\$).did. or (EP-798777-\$ or JP-63284857-\$). did. | US-PGPUB; USPAT; JPO; DERWENT | OR | OFF | 2002/11/24 13:12 |

| | Τ | 1 | | 1 | r | 1 |
|-----|------|--|---|----|--------------|------------------|
| S76 | 6 | ((US-6255151-\$ or US-6252281-\$ or US-6087727-\$ or US-5463234-\$ or US-6221770-\$ or US-5523626-\$ or US-4557943-\$ or US-5239196-\$ or US-6031288-\$ or US-6217721-\$ or US-5386135-\$ or US-6284316-\$ or US-6143362-\$).did. or (US-20010022369-\$ or US-20020060331-\$ or US-2001006240-\$ or US-20010052610-\$ or US-20020043678-\$).did. or (JP-08176823-\$).did. or (EP-798777-\$ or JP-63284857-\$). did.) and titanium adj silicide | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/11/24 13:21 |
| S77 | 5937 | ((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/302) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313)).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2002/11/24 13:44 |
| S78 | 146 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/302) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313)).CCLS.) and titanium near3 (zinc or zn or cadmium or cd or mercury or hg or alumin\$um or al or gallium or ga or indium or in or tin or sn or germanium or ge or lead or pb or arsenic or as or antimony or sb) and titanium adj silicide | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/11/24 13:49 |

| S79 | 189 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/302) or (257/302) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313)).CCLS.) and titanium near13 (zinc or zn or cadmium or cd or mercury or hg or alumin\$um | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/11/24 13:51 |
|-----|-----|--|--|----------|----|------------------|
| | | or al or gallium or ga or indium or in or tin or sn or germanium or ge or lead or pb or arsenic or as or antimony or sb) and titanium adj silicide and contact | | | | |
| S80 | 84 | (((257/296) or (257/297) or (257/298) or (257/301) or (257/302) or (257/302) or (257/303) or (257/304) or (257/305) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313)).CCLS.) and titanium near13 (zinc or zn or cadmium or cd or mercury or hg or alumin\$\text{um} or al or gallium or ga or indium or in or tin or sn or germanium or ge or lead or pb or arsenic or as or antimony or sb) and titanium adj silicide and contact and memory.ti, ab,clm. (((257/296) or (257/297) or (257/298) or (257/302) or (257/303) or (257/304) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/307) or (257/308) or (257/307) or (257/307) or (257/307) or (257/310) or (257/311) or (257/312) or (257/313)).CCLS.) and titanium near13 (zinc or zn or cadmium or cd or mercury or hg or alumin\$\text{um} or al or gallium or ga or indium or in or tin or sn or germanium or ge or lead or pb or arsenic or as or antimony or sb) and titanium adj silicide and contact.ti,ab,clm. and memory.ti,ab,clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR OR | ON | 2002/11/24 13:53 |

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|-----|----|--|---|-----|-----|------------------|
| S82 | 84 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/302) or (257/302) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313)).CCLS.) and titanium near13 (zinc or zn or cadmium or cd or mercury or hg or alumin\$1um or al or gallium or ga or indium or in or tin or sn or germanium or ge or lead or pb or arsenic or as or antimony or sb) and titanium adj silicide and contact.ti,ab,clm. and memory.ti,ab,clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/11/24 14:38 |
| S83 | 2 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/302) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313)).CCLS.) and titanium adj precursor near12 (germanium or indium or arsenic or lead or cadmium or mercury or zinc or aluminum or aluminium or gallium or tin or antimony) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/11/24 14:41 |
| S84 | 25 | (US-6143362-\$ or US-6284316-\$ or US-6252281-\$ or US-5386135-\$ or US-6252281-\$ or US-6221770-\$ or US-6255151-\$ or US-6221770-\$ or US-5523626-\$ or US-4557943-\$ or US-5239196-\$ or US-6031288-\$ or US-6217721-\$ or US-5463234-\$ or US-6087727-\$).did. or (US-20010006240-\$ or US-20020060331-\$ or US-20020043678-\$ or US-2002006716-\$ or US-20010022369-\$ or US-20010052610-\$ or US-20020047153-\$ or US-20020017724-\$).did. or (JP-08176823-\$).did. or (JP-63284857-\$ or EP-798777-\$). did. | US-PGPUB; USPAT; JPO; DERWENT | OR | OFF | 2002/11/24 15:03 |

| | 1 | T | T | 1 | 1 | T |
|-----|------|---|---|----|-----|------------------|
| S85 | 25 | ((US-6143362-\$ or US-6284316-\$ or US-6252281-\$ or US-5386135-\$ or US-6255151-\$ or US-6221770-\$ or US-5523626-\$ or US-4557943-\$ or US-5239196-\$ or US-6031288-\$ or US-6217721-\$ or US-5463234-\$ or US-6087727-\$).did. or (US-20010006240-\$ or US-20020060331-\$ or US-20020043678-\$ or US-2002006716-\$ or US-20010052610-\$ or US-20020053691-\$ or US-20020047153-\$ or US-20020017724-\$).did. or (JP-08176823-\$).did. or (JP-63284857-\$ or EP-798777-\$). did.) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/11/24 15:08 |
| S86 | 9 | (("5229643") or ("5355020") or ("5534716") or ("5725739") or ("6016012") or ("6143649") or ("6208033") or ("6255216") or ("6320213")).PN. | USPAT; USOCR | OR | OFF | 2002/11/24 15:43 |
| S87 | 0 | jp-044196419\$-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/11/24 15:44 |
| S88 | 2 | jp-04196419\$-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; | OR | ON | 2002/11/24 15:44 |
| S89 | 9 | (US-6255216-\$ or US-6320213-\$ or US-6143649-\$ or US-6208033-\$ or US-5725739-\$ or US-6016012-\$ or US-5534716-\$ or US-5229643-\$ or US-5355020-\$).did. | IBM_TDB USPAT | OR | OFF | 2002/11/24 16:07 |
| S90 | 3683 | ((257/734) or (257/757) or (257/754) or (257/755) or (257/763) or (257/770) or (257/771)).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2002/11/24 16:08 |

| S91 | 13 | (((257/734) or (257/757) or (257/754) or (257/755) or (257/763) or (257/770) or (257/771)).CCLS.) and (titanium adj alloy or (titanium near13 (cadmium or indium or aluminium or aluminium or aluminium or arsenic or lead or germanium or antimony or mercury or zinc))) and titanium adj silicide and contact.ab,ti,clm. and memory. ti,ab,clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2002/11/24 16:22 |
|-----|----|---|---|----|-----|------------------|
| S92 | 2 | ("6143362").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2002/11/24 19:36 |
| S93 | 6 | ("5656836").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2002/11/24 19:51 |
| S94 | 2 | ("6284316").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2002/11/24 19:51 |
| S95 | 2 | ("6284316").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2003/04/18 16:08 |
| S96 | 2 | ("6143362").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2003/04/18 16:08 |
| S97 | 0 | ("941123.ap.").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2003/04/18 17:44 |
| S98 | 5 | "941123".ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2003/04/18 17:47 |

| | 7 | | | | ľ | T |
|------------------------|---------------|---|--|-------------|------------|------------------|
| S99 | 9831 | ((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/301) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313) or (257/734) or (257/755) or (257/754) or (257/757) or (257/763) or (257/770)).CCLS. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2003/04/18 17:50 |
| S10 | 283 | (((257/296) or (257/297) or | US-PGPUB; | OR | ON | 2003/04/18 17:52 |
| 0 | | (257/298) or (257/299) or | USPAT; | | | |
| | | (257/300) or (257/301) or | EPO; JPO; | | | |
| | | (257/301) or (257/302) or | DERWENT; | | | |
| | | (257/303) or (257/304) or | IBM_TDB | | | |
| | In on to word | (257/305) or (257/306) or | | | | |
| | | (257/307) or (257/308) or | | | | |
| 나 시설 | | (257/309) or (257/310) or (257/311) or (257/312) or | | | | |
| | | (257/311) or (257/734) or | | | | |
| | | (257/755) or (257/754) or | | 7、曹 | | |
| | | (257/757) or (257/763) or | | | | |
| | | (257/770)).CCLS.) and (tis or | | | | |
| | | titanium adj silicide) and (titanium | | Ţ. | | |
| | | | | | | |
| - 1 m | | near12 alloy) | | | | |
| S10 | 190 | (((257/296) or (257/297) or | US-PGPUB; | OR | ON | 2003/04/18 17:53 |
| S10 1 | 190 | (((257/296) or (257/297) or (257/298) or (257/299) or | USPAT; | OR | ON | 2003/04/18 17:53 |
| 1 | 190 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or | USPAT; EPO; JPO; | OR | ON | 2003/04/18 17:53 |
| 1 | 190 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/301) or (257/302) or | USPAT; EPO; JPO; DERWENT; | OR | ON | 2003/04/18 17:53 |
| 1 | 190 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/301) or (257/303) or (257/303) or (257/304) or | USPAT; EPO; JPO; | OR | ON | 2003/04/18 17:53 |
| 1 | 190 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/301) or (257/303) or (257/304) or (257/305) or (257/306) or | USPAT; EPO; JPO; DERWENT; | OR | ON | 2003/04/18 17:53 |
| 1 | 190 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/301) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or | USPAT; EPO; JPO; DERWENT; | OR | ON | 2003/04/18 17:53 |
| 1 | 190 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/301) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or | USPAT; EPO; JPO; DERWENT; | OR | ON | 2003/04/18 17:53 |
| 1 | 190 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/301) or (257/301) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or | USPAT; EPO; JPO; DERWENT; | OR | ON | 2003/04/18 17:53 |
| 1 | 190 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/301) or (257/303) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313) or (257/34) or | USPAT; EPO; JPO; DERWENT; | OR | ON | 2003/04/18 17:53 |
| 1 | 190 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/301) or (257/301) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or | USPAT; EPO; JPO; DERWENT; | OR | ON | 2003/04/18 17:53 |
| 1 | 190 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/301) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313) or (257/734) or (257/755) or (257/754) or (257/757) or (257/763) or (257/770)).CCLS.) and (tis or | USPAT; EPO; JPO; DERWENT; | OR | ON | 2003/04/18 17:53 |
| 1 | 190 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/301) or (257/303) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313) or (257/754) or (257/757) or (257/763) or (257/770)).CCLS.) and (tis or titanium adj silicide) and (titanium | USPAT; EPO; JPO; DERWENT; | OR | ON | 2003/04/18 17:53 |
| 1 | | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/301) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313) or (257/734) or (257/755) or (257/754) or (257/757) or (257/763) or (257/770)).CCLS.) and (tis or titanium adj silicide) and (titanium near4 alloy) | USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | |
| 510 | 190 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/301) or (257/303) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313) or (257/734) or (257/755) or (257/754) or (257/757) or (257/763) or (257/770)).CCLS.) and (tis or titanium adj silicide) and (titanium | USPAT; EPO; JPO; DERWENT; | OR | ON | 2003/04/18 17:53 |
| 1 | | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/301) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313) or (257/734) or (257/755) or (257/754) or (257/757) or (257/763) or (257/770)).CCLS.) and (tis or titanium adj silicide) and (titanium near4 alloy) | USPAT; EPO; JPO; DERWENT; IBM_TDB | | | |
| 510 | | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/301) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313) or (257/734) or (257/755) or (257/754) or (257/757) or (257/763) or (257/770)).CCLS.) and (tis or titanium adj silicide) and (titanium near4 alloy) | USPAT; EPO; JPO; DERWENT; IBM_TDB | | | |
| S10 2 S10 | 16 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/301) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313) or (257/734) or (257/755) or (257/754) or (257/757) or (257/763) or (257/770)).CCLS.) and (tis or titanium adj silicide) and (titanium near4 alloy) "5924012" | USPAT; EPO; JPO; DERWENT; IBM_TDB USPAT; USPAT; USOCR US-PGPUB; | OR | OFF | 2003/11/11 11:31 |
| \$10 2 \$10 3 | 16 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/301) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313) or (257/734) or (257/755) or (257/754) or (257/757) or (257/763) or (257/770)).CCLS.) and (tis or titanium adj silicide) and (titanium near4 alloy) "5924012". | USPAT; EPO; JPO; DERWENT; IBM_TDB USPAT USPAT; USOCR US-PGPUB; USPAT; | OR OR | OFF | 2003/11/11 11:31 |
| \$10 2 \$10 3 | 16 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/301) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313) or (257/734) or (257/755) or (257/754) or (257/757) or (257/763) or (257/770)).CCLS.) and (tis or titanium adj silicide) and (titanium near4 alloy) "5924012". | USPAT; EPO; JPO; DERWENT; IBM_TDB USPAT USPAT; USOCR US-PGPUB; USPAT; USOCR; | OR OR | OFF | 2003/11/11 11:31 |
| \$10 2 \$10 3 | 16 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/301) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313) or (257/734) or (257/755) or (257/754) or (257/757) or (257/763) or (257/770)).CCLS.) and (tis or titanium adj silicide) and (titanium near4 alloy) "5924012". | USPAT; EPO; JPO; DERWENT; IBM_TDB USPAT USPAT; USOCR US-PGPUB; USPAT; | OR OR | OFF | 2003/11/11 11:31 |
| \$10 2 \$10 3 | 16 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/301) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313) or (257/734) or (257/755) or (257/754) or (257/757) or (257/763) or (257/770)).CCLS.) and (tis or titanium adj silicide) and (titanium near4 alloy) "5924012". | USPAT; EPO; JPO; DERWENT; IBM_TDB USPAT USPAT; USOCR US-PGPUB; USPAT; USOCR; EPO; JPO; | OR OR | OFF | 2003/11/11 11:31 |

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|----------|------|--|------------------------------|----|---------------------------------------|---------------------------------------|
| S10 5 | 4 | "941125".ap. | US-PGPUB; USPAT | OR | OFF | 2003/11/11 16:11 |
| S10 6 | 1 | ("6153490").PN. | USPAT; USOCR | OR | OFF | 2003/11/11 15:04 |
| S10 7 | 1 | ("5239196").PN. | USPAT; USOCR | OR | OFF | 2003/11/11 15:08 |
| S10 8 | 3 | "941123".ap. | USPAT | OR | OFF | 2003/11/11 15:08 |
| S10 9 | 1 | ("6217721").PN. | USPAT; USOCR | OR | OFF | 2003/11/11 16:11 |
| S11 0 | 0 | jp-2000026196\$-\$.did. | USPAT | OR | OFF | 2003/11/12 09:08 |
| S11 | 2 | jp-2000026196\$-\$.did. | USPAT; JPO; DERWENT | OR | OFF | 2003/11/12 09:08 |
| S11 2 | 2873 | 257/296 | USPAT | OR | OFF | 2003/11/12 15:10 |
| S11 3 | 6964 | ((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/302) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313) or (257/734) or (257/754) or (257/755) or (257/757) or (257/763) or (257/770)).CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2003/11/12 15:12 |
| S11 4 | 0 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/302) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313) or (257/734) or (257/754) or (257/755) or (257/757) or (257/763) or (257/770)).CCLS.) and titanium near12 (zinc zn cadmium cd mercury hg aluminium aluminum al gallium ga indium tin sn silicon si antimony germanium ge lead pb arsenic) and memory and tintaium | US-PGPUB; USPAT | OR | OFF | 2003/11/12 15:15 |
| | | adj silicide and (contact via) | | | | · · · · · · · · · · · · · · · · · · · |

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| S11 5 | 23 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/302) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313) or (257/312) or (257/754) or (257/755) or (257/757) or (257/755) or (257/757) or (257/763) or (257/770)).CCLS.) and (bpsg borophosphosilicate boro-phosphosilicate boro-phospho-silicate) near5 glass and memory and (ti titanium) near2 alloy | US-PGPUB; USPAT | OR | OFF | 2003/11/12 15:16 |
| S11 6 | 4 | "947405".ap. | US-PGPUB; USPAT | OR | OFF | 2003/11/12 16:28 |
| S11 7 | 0 | "9479847" | US-PGPUB; USPAT | OR | OFF | 2003/11/12 16:29 |
| S11 8 | 2 | "479847".ap. | US-PGPUB; USPAT | OR | OFF | 2003/11/12 16:29 |
| S11 9 | 157 | "20010042505" "4994410" "5444018" "5846881" "5970309" "6140230" "6294469" "6605533" | US-PGPUB; USPAT | OR | OFF | 2004/03/19 20:17 |
| S12 0 | 8 | (("20010042505") or ("4994410") or ("5444018") or ("5846881") or ("5970309") or ("6140230") or ("6294469") or ("6605533")).PN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2004/03/19 20:19 |

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|----------|-----|--|---|----|-----|------------------|
| S12 1 | 49 | (US-6284316-\$ or US-6143362-\$ or US-4557943-\$ or US-5239196-\$ or US-6087727-\$ or US-5463234-\$ or US-6221770-\$ or US-5523626-\$ or US-5846881-\$ or US-4994410-\$ or US-5444018-\$ or US-6405533-\$ or US-6294469-\$ or US-6140230-\$ or US-6255216-\$ or US-6208033-\$ or US-6255216-\$ or US-6252281-\$ or US-6255216-\$ or US-6252281-\$ or US-6255151-\$ or US-6016012-\$ or US-5534716-\$ or US-5725739-\$ or US-5355020-\$ or US-5725739-\$ or US-5355020-\$ or US-5229643-\$ or US-5924012-\$ or US-6153490-\$). did. or (US-5970309-\$ or US-5386135-\$ or US-631288-\$ or US-6217721-\$ or US-6320213-\$). did. or (US-20020047153-\$ or US-20020000662-\$ or US-20020000662-\$ or US-20020000263-\$ or US-20010042505-\$ or US-20010042505-\$ or US-20010042505-\$ or US-2001006240-\$ or US-20020043678-\$ or US-20030001183-\$ or US-20030001183-\$ or US-20030006716-\$).did. or (JP-08176823-\$ or JP-04196419-\$). did. or (EP-798777-\$ or JP-63284857-\$ or JP-04196419-\$). did. | US-PGPUB; USPAT; JPO; DERWENT | OR | OFF | 2004/03/20 11:53 |
| S12 2 | 663 | titanium adj nitride near2 alloy | US-PGPUB; USPAT; EPO; JPO; DERWENT; | OR | OFF | 2004/03/20 11:56 |
| | | | IBM_TDB | | - : | |
| S12 3 | 48 | titanium adj nitride adj alloy | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/03/20 12:00 |
| S12 4 | 5 | "941123".ap. | US-PGPUB; USPAT; | OR | OFF | 2004/03/20 11:57 |
| | | | EPO; JPO; DERWENT; IBM_TDB | | | |
| S12 5 | 13 | titanium adj alloy and conformal and titanium adj silicide and memory adj array | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/03/20 12:15 |

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|----------|-----|--|---|-----------|-----|------------------|
| S12 6 | 9 | titanium adj alloy near12 titanium adj silicide and memory.ti,ab,clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/03/20 12:16 |
| S12 7 | 9 | titanium adj alloy near12 titanium adj silicide and alloy and memory.ti, ab,clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/03/20 12:17 |
| S12 8 | 273 | titanium adj alloy near12 titanium and alloy and memory.ti,ab,clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/03/20 12:17 |
| S12 9 | 536 | (TiW TiCd TiZn TiSn Ti TiHg TiAl TiGa TiIn TiGe TiPb TiAs TiSb TiW TiCd TiZn TiSn Ti TiHg TiAl TiGa TiIn TiGe TiPb TiAs TiSb titanium) near20 silicide and alloy and memory.ti,ab,clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/03/20 12:50 |
| S13 0 | 70 | (titanium adj silicide tisi "tisi/sub.") and titanium near4 alloy and memory.ti,ab,clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/03/20 13:07 |
| S13 1 | 0 | (anneal annealing) near4 titanium adj alloy near12 silicide | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/03/20 13:08 |
| S13 2 | 830 | (anneal annealing) near4 titanium near12 silicide | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/03/20 13:08 |
| S13 3 | 338 | (anneal annealing) near6 Ti\$3 near6 silicide | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/03/20 13:10 |
| S13 4 | 8 | (anneal annealing) near6 Ti\$3 near6 silicide and titanium near2 alloy | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/03/20 13:11 |
| S13 5 | 2 | (anneal annealing) near6 Ti\$3 near6 silicide and titanium near2 alloy and memory.ti,ab,clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ΘR | OFF | 2004/03/20 13:12 |

| S13 6 | 2 | (anneal annealing) near6 Ti\$3 near6 silicide and titanium near2 alloy and (sram dram memory).ti, ab,clm. and alloy | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/03/20 13:22 |
|----------|----|---|---|----|-----|------------------|
| S13 7 | 59 | contact adj (hole plug) near6 alloy and silicide and (sram dram memory)".ti,ab,clm" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/03/20 13:24 |
| S13 8 | 17 | contact adj (hole plug) near6 alloy near6 (titanium ti) and silicide and (sram dram memory)".ti,ab,clm" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/03/20 13:40 |
| S13 9 | 17 | contact adj (hole plug) near6 alloy near6 (titanium ti) and silicide and (sram dram memory)".ti,ab,clm" and (tungsten W alumin\$um Al) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/03/20 13:41 |

| | Τ | T | 1 | · | 1 | · · · · · · · · · · · · · · · · · · · |
|----------|-----|---|--|----------------|-----|---------------------------------------|
| S14 0 | 54 | (US-5475240-\$ or US-6198151-\$ or US-6043526-\$ or US-6433434-\$ or US-5444018-\$ or US-6140230-\$ or US-5846881-\$ or US-6605533-\$ or US-6294469-\$ or US-6605533-\$ or US-5970309-\$ or US-5153490-\$ or US-5924012-\$ or US-5229643-\$ or US-5355020-\$ or US-6208033-\$ or US-6143649-\$ or US-6208033-\$ or US-6255216-\$ or US-6320213-\$ or US-6217721-\$ or US-6031288-\$ or US-6217721-\$ or US-6031288-\$ or US-6217721-\$ or US-6031288-\$ or US-5239196-\$ or US-4557943-\$). did. or (US-5523626-\$ or US-6221770-\$ or US-5463234-\$ or US-6252281-\$ or US-6284316-\$ or US-631362-\$ or US-6253151-\$). did. or (US-20020017724-\$ or US-20020006525-\$ or US-20010042505-\$ or US-2002000662-\$ or US-2002000662-\$ or US-2002000662-\$ or US-20020006331-\$ or US-20020006331-\$ or US-20020043678-\$ or US-20020043678-\$ or US-20010022369-\$).did. or (JP-04196419-\$ or JP-08176823-\$). did. or (JP-04196419-\$ or JP-08176823-\$). did. or (JP-04196419-\$ or JP-08176823-\$). did. or (JP-04196419-\$ or JP-08176823-\$). did. or (JP-04196419-\$ or JP-08176823-\$). did. or (JP-04196419-\$ or JP-08176823-\$). did. or (JP-04196419-\$ or JP-08176823-\$). did. or (JP-04196419-\$ or JP-08176823-\$). did. or (JP-04196419-\$ or JP-08176823-\$). did. or (JP-04196419-\$ or JP-08176823-\$). did. or (JP-04196419-\$ or JP-08176823-\$). did. | US-PGPUB; USPAT; JPO; DERWENT | OR | OFF | 2004/03/20 14:21 |
| S14 1 | 5 | "941123".ap. | US-PGPUB; USPAT; JPO; DERWENT | OR | OFF | 2004/03/20 14:42 |
| S14 2 | 771 | platinum adj group near6 titanium | US-PGPUB; USPAT; JPO; DERWENT | OR | OFF | 2004/03/20 14:45 |

| S14 3 | 9361 | ((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/302) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313) or (257/734) or (257/754) or (257/755) or (257/757) or (257/758) or (257/763) or (257/764) or (257/770) or (257/764) or (257/770) or (257/906)).CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2004/03/20 15:03 |
|-----------|------|---|---|----|-----|------------------|
| \$14 4 | 26 | (((257/296) or (257/297) or (257/298) or (257/299) or (257/300) or (257/301) or (257/302) or (257/303) or (257/304) or (257/305) or (257/306) or (257/307) or (257/308) or (257/309) or (257/310) or (257/311) or (257/312) or (257/313) or (257/734) or (257/754) or (257/755) or (257/757) or (257/758) or (257/763) or (257/764) or (257/763) or (257/764) or (257/770) or (257/906)).CCLS.) and titanium near10 alloy and (titanium silicide tisi "tisi.sib."\$1) and (memory dram sram).ti,ab,clm. and (high-temperature anneal annealing) and contact adj (plug hole) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/03/20 14:51 |
| S14 5 | 465 | (257/764).CCLS. | US-PGPUB; USPAT; USOCR | OR | OFF | 2004/09/09 18:41 |
| S14 6 | 20 | ((257/764).CCLS.) and (ti titanium) near3 alloy and (ti titanium) adj silicide | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/03/20 16:15 |
| S14 7 | 6 | ("5239196").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/03/20 16:15 |
| S14 8 | 7 . | (sandhu.in. micron adj technolog\$3. as.) and titanium adj alloy.clm. and memory.clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/06 20:05 |

| S14 9 | 7 | ((sandhu.in. micron adj technolog\$3.as.) and titanium adj alloy.clm. and memory.clm.) and (zinc cadmium mercuriy alumin\$um gallium indium tin silicon germanium lead arsenic antimony Zn Cd Hg Al Ga Sn Si Ge Pb As Sb) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/06 20:17 |
|----------|---|---|---|----|-----|------------------|
| S15 0 | 5 | "030705".ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/07 16:45 |
| S15 1 | 3 | "389562".ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/07 17:17 |
| S15 2 | 3 | "489187".ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/07 17:19 |
| S15 3 | 5 | "940917".ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/07 17:32 |
| S15 4 | 4 | "940980".ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/07 17:36 |
| S15 5 | 4 | "941125".ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/07 17:42 |
| S15 6 | 5 | "030705".ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/07 17:45 |
| S15 7 | 3 | "389562".ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/07 17:48 |
| S15 8 | 3 | "489187".ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/07 17:52 |

| S15 | 4 | "940980".ap. | US-PGPUB; | OR | OFF | 2004/09/07 17:55 |
|----------|----|----------------------------------|---|------|-----|--|
| 9 | | эноэоо .ар. | USPAT; EPO; JPO; DERWENT; IBM_TDB | OK . | | 2007/03/07 17.33 |
| S16 | 4 | "941125".ap. | US-PGPUB; | OR | OFF | 2004/09/07 18:08 |
| 0 | | | USPAT; EPO; JPO; DERWENT; IBM_TDB | | | |
| S16 1 | 2 | ("6284316").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/07 18:00 |
| S16 2 | 4 | (("5401674") or ("6433434")).PN. | US-PGPUB; USPAT; | OR | OFF | 2004/09/07 18:08 |
| - 15 | | | USOCR; EPO; JPO; DERWENT; IBM_TDB | | | 武地 |
| S16 | 2 | jp-05006995\$-\$.did. | US-PGPUB; | OR | OFF | 2004/09/08 08:27 |
| 3 | | | USPAT; EPO; JPO; DERWENT; IBM_TDB | | | |
| S16 4 | 2 | ("5401674").PN. | US-PGPUB; USPAT; | OR | OFF | 2004/09/08 15:59 |
| | | | USOCR; EPO; JPO; | | | en en en en en en en en en en en en en e |
| | | | DERWENT; IBM_TDB | | | |
| S16 5 | 2 | "400144".ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/08 12:56 |
| S16 | 5 | "941123".ap. | US-PGPUB; | OR | OFF | 2004/09/08 13:57 |
| 6 | | | USPAT; EPO; JPO; | | | |
| | | | DERWENT; IBM_TDB | | | |
| S16 | 52 | "5239196" | US-PGPUB; | OR | OFF | 2004/09/08 14:13 |
| 7 | | | USPAT; EPO; JPO; DERWENT; IBM_TDB | | į | : |

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|----------|-------------|---|---|--------------|-----|--|
| S16 8 | 6 | ("5239196").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/08 14:59 |
| S16 9 | 0 | (MISFET near6 memory array) and (MISFET near6 control adj circuit) and (MISFET near6 "I/O circuit") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/08 15:00 |
| S17 0 | 0 | (MISFET near12 memory array) and (MISFET near12 control adj circuit) and (MISFET near12 ("I/O circuit" input adj circuit)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/08 15:02 |
| S17 1 | 6 | (MOSFET near12 memory array) and (MOSFET near12 control adj circuit) and (MOSFET near12 ("I/O circuit" input adj circuit)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/08 15:02 |
| S17 2 | 0 | ("memoryadjarraynear6(MOSFETM OSCMOSFETCMOS)").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/08 15:59 |
| S17 3 | 1273 | memory adj array near8 (MOS CMOS MOSFET CMOSFET) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/08 16:00 |
| S17 4 | 785 | memory adj array near4 (MOS CMOS MOSFET CMOSFET) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/08 16:00 |
| S17 5 | 553 | memory adj array near3 (MOS CMOS MOSFET CMOSFET) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/08 16:00 |
| S17 6 | 243 | memory adj array near3 (MOS CMOS MOSFET CMOSFET) and (input near6 output near6 circuit) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/09/08 16:02 |
| S17 7 | 120 | memory adj array near3 (MOS CMOS MOSFET CMOSFET) and (input near6 output near6 circuit) near6 (MOS CMOS MOSFET CMOSFET) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/09/08 16:03 |

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|----------|----|---|---|----|-------------|------------------|
| S17 8 | 24 | memory adj array near3 (MOS CMOS MOSFET CMOSFET) and (input near6 output near6 circuit) near6 (MOS CMOS MOSFET CMOSFET) and (control adj circuit) near6 (MOS MOSFET CMOS CMOSFET) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/09/08 16:04 |
| S17 9 | 13 | memory adj array near3 (MOS CMOS MOSFET CMOSFET) and (input near6 output near6 circuit) near6 (MOS CMOS MOSFET CMOSFET) and (control adj circuit) near3 (MOS MOSFET CMOSFET) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/09/08 16:49 |
| S18 0 | 2 | ("5401674").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/08 17:09 |
| S18 1 | 1 | titanium adj silicide and "941123". ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; | OR | OFF | 2004/09/08 17:10 |
| S18 2 | 1 | "5654577".pn. and (nmos mos nmosfet pmosfet pmos cmos cmosfet) near6 (input output) | IBM_TDB US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 07:45 |
| S18 3 | 1 | "5654577".pn. and (nmos mos nmosfet pmosfet pmos cmos cmosfet) near6 (input output) and din adj buffer | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 08:39 |
| S18 4 | 6 | contact adj hole near4 nmosfet | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 08:42 |
| S18 5 | 23 | "5401674" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 10:24 |
| S18 6 | 2 | ("5401674").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 10:26 |

| S18 7 | 36 | high adj aspect adj ratio and contact adj hole and MOSFET and silicide and BPSG | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 10:27 |
|----------|----|--|---|-------|-----|------------------|
| S18 8 | 11 | high adj aspect adj ratio and contact adj hole and MOSFET and titanium adj silicide and BPSG | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 10:27 |
| S18 9 | 0 | high adj aspect adj ratio near6 contact adj hole and MOSFET and titanium adj silicide and BPSG | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 10:27 |
| S19 0 | 0 | high adj aspect adj ratio near8 contact adj hole and MOSFET and titanium adj silicide and BPSG | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 10:27 |
| S19 1 | 4 | high adj aspect adj ratio same contact adj hole and MOSFET and titanium adj silicide and BPSG | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 10:36 |
| S19 2 | 5 | "941123".ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 10:32 |
| S19 3 | 5 | high adj aspect adj ratio same contact adj (plug hole) and MOSFET and titanium adj silicide and BPSG | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 10:58 |
| S19 4 | 11 | high adj aspect adj ratio same Moore\$1 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 12:47 |
| S19 5 | 2 | ("5644166").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 12:48 |
| S19 6 | 2 | (("5644166").PN.) and BPSG and aspect adj ratio | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | -OR - | OFF | 2004/09/09 13:41 |

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|--------|--|--|----|-----|------------------|
| S19 70 | (US-5644166-\$ or US-6051286-\$ or US-6570252-\$ or US-4985750-\$ or US-5233217-\$ or US-6239492-\$ or US-5401674-\$ or US-6153490-\$ or US-6433434-\$ or US-6043526-\$ or US-6552431-\$ or US-6294469-\$ or US-6605533-\$ or US-6294469-\$ or US-6650017-\$ or US-4782380-\$ or US-5970309-\$ or US-5846881-\$ or US-5970309-\$ or US-5475240-\$ or US-5924012-\$ or US-5239196-\$ or US-6031288-\$ or US-6217721-\$). did. or (US-6320213-\$ or US-6198151-\$ or US-6255216-\$ or US-6208033-\$ or US-5463234-\$ or US-6221770-\$ or US-5773890-\$ or US-6221770-\$ or US-5773890-\$ or US-523626-\$ or US-5773890-\$ or US-5534716-\$ or US-6143649-\$ or US-63616012-\$ or US-6143649-\$ or US-5386135-\$ or US-6143649-\$ or US-2003003119246-\$ or US-2003003119246-\$ or US-20030031183-\$ or US-20020066240-\$ or US-2002006716-\$ or US-20020006525-\$ or US-20020006525-\$ or US-20020006525-\$ or US-20020000662-\$ or US-20020000663-\$ or US-20020000663-\$ or US-20020000663-\$ or US-20020000663-\$ or US-20020000663-\$ or US-20020000663-\$ or US-20020000663-\$ or US-20020000663-\$ or US-20020000663-\$ or US-20020000663-\$ or US-20020000663-\$ or US-20020000663-\$ or US-20020000663-\$ or US-20020000663-\$ or US-20020000663-\$ or US-20020000665-\$ or US-20020000663-\$ or US-20020000665-\$ or US-20020000665-\$ or US-20020000665-\$ o | US-PGPUB; USPAT; JPO; DERWENT | OR | OFF | 2004/09/09 13:42 |
| | US-20020060331-\$ or US-20020017724-\$ or US-20020043678-\$ or US-20020006525-\$ or | | | | |
| | US-20020000263-\$ or US-20020047153-\$ or US-20020053691-\$ or US-20010022369-\$ or US-20010052610-\$).did. or (JP-08176823-\$ or JP-04196419-\$). did. or (JP-04196419-\$ or | | | | |
| | JP-63284857-\$ or EP-798777-\$). did. | | | | |

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|----------|---|--|---|----|-----|------------------|
| S19 8 | | ((US-5644166-\$ or US-6051286-\$ or US-6570252-\$ or US-4985750-\$ or US-6239492-\$ or US-5233217-\$ or US-6239492-\$ or US-5401674-\$ or US-6153490-\$ or US-6433434-\$ or US-6043526-\$ or US-6552431-\$ or US-6429493-\$ or US-6605533-\$ or US-6294469-\$ or US-6140230-\$ or US-4994410-\$ or US-6650017-\$ or US-4782380-\$ or US-5970309-\$ or US-5846881-\$ or US-594012-\$ or US-5239196-\$ or US-631288-\$ or US-5239196-\$ or US-6031288-\$ or US-6217721-\$). did. or (US-6320213-\$ or US-6198151-\$ or US-6255216-\$ or US-6208033-\$ or US-5463234-\$ or US-6208033-\$ or US-5773890-\$ or US-523626-\$ or US-5773890-\$ or US-5523626-\$ or US-5773890-\$ or US-55355020-\$ or US-5229643-\$ or US-6316012-\$ or US-6143649-\$ or US-5355020-\$ or US-6143649-\$ or US-5386135-\$ or US-6143649-\$ or US-5386135-\$ or US-6255151-\$). did. or (US-20030119246-\$ or US-2003003144-\$ or US-2003003144-\$ or US-2003003144-\$ or US-2003003144-\$ or US-2002006682-\$ or US-20020066331-\$ or US-2002006635-\$ or US-200200662-\$ or US-2002000662-\$ or US-2002 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 13:46 |
| S19 9 | 1 | seed adj layer and titanium near6 zinc and barrier adj layer and titanium adj silicide | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 13:48 |
| S20 0 | 2 | seed adj layer and titanium near6 (zinc germanium germanide) and barrier adj layer and titanium adj silicide | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 13:50 |

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|-----------|----|---|---|----|-----------|------------------|
| S20 1 | 48 | seed adj layer and titanium near6 (zinc germanium germanide indium tin arsenic antimony gallium cadmium mercury) and barrier adj layer and titanium adj silicide | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 13:51 |
| S20 2 | 48 | seed adj layer and titanium near6 (zinc germanium germanide tin arsenic antimony gallium cadmium mercury) and barrier adj layer and titanium adj silicide | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 13:51 |
| S20 3 | 48 | seed adj layer and titanium near6 (zinc germanium germanide tin arsenic antimony gallium cadmium mercury) and barrier adj layer and titanium adj silicide | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 13:52 |
| S20 4 | 2 | seed adj layer and titanium near6 (zinc germanium germanide arsenic antimony gallium cadmium mercury) and barrier adj layer and titanium adj silicide | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 13:53 |
| S20 5 | 64 | titanium near6 (zinc germanium germanide arsenic antimony gallium cadmium mercury) and barrier adj layer and titanium adj silicide | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 13:53 |
| S20 6 | 27 | titanium near6 (zinc germanium germanide arsenic antimony gallium cadmium mercury) and barrier adj layer and titanium adj silicide and bpsg | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 13:53 |
| S20 7 | 0 | titanium near6 (zinc germanium germanide arsenic antimony gallium cadmium mercury) and barrier adj layer and titanium adj silicide and bpsg and step adj coverage.clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 13:54 |
| S20 8 | 4 | titanium near6 (zinc germanium germanide arsenic antimony gallium cadmium mercury) and barrier adj layer and titanium adj silicide and bpsg and step adj coverage | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 13:56 |
| \$20 9 | 0 | titanium near6 (zinc germanium germanide arsenic antimony gallium cadmium mercury) and barrier adj layer and titanium adj silicide and bpsg and step adj coverage near6 ("%" percent percentage) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/09/09 13:57 |
| S21 0 | 19 | bpsg and step adj coverage near6 ("%" percent percentage) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/09/09 14:08 |

| S21 1 | 2 | seed adj layer and zinc and titanium adj silicide and contact and interconnect and (mosfet nmosfet pmosfet cmos cmosfet) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/09/09 14:20 |
|----------|-------|---|---|----|----|------------------|
| S21 2 | 17879 | dielectric adj layer near6 silicon dioxide same "in situ" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/09/09 14:21 |
| S21 3 | 0 | dielectric adj layer near6 silicon adj dioxide same "in situ" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/09/09 14:21 |
| S21 4 | 0 | dielectric adj layer near6 silicon adj dioxide near6 burning | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/09/09 14:22 |
| S21 5 | 3566 | dielectric adj layer near3 silicon adj dioxide | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/09/09 14:29 |
| S21 6 | 28 | dielectric adj layer near3 silicon adj dioxide near6 thermally adj grown | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/09/09 15:52 |
| S21 7 | 125 | step adj coverage near10 "100" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/09/09 15:53 |
| S21 8 | 11 | step adj coverage near10 "100" near3 (percent "%") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/09/09 15:53 |
| S21 9 | 0 | step adj coverage near10 "100" adj (percent "%") and BPSG | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/09/09 15:54 |
| S22 0 | 0 | step adj coverage near10 "100" adj (percent "%") and (borophosphosilicate BPSG) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/09/09 15:54 |

| S22 1 | 8 | step adj coverage near10 "100" adj (percent "%") | US-PGPUB; USPAT; EPO; JPO; | OR | ON | 2004/09/09 16:16 |
|----------|----------------------------------|--|--|---------|-------|--|
| | | | DERWENT; IBM_TDB | | | |
| S22 | 70 | (US-6239492-\$ or US-5233217-\$ or | US-PGPUB; | OR | OFF | 2004/09/09 16:14 |
| 2 | | US-4985750-\$ or US-5401674-\$ or | USPAT; | | ٠. | |
| | | US-6051286-\$ or US-5644166-\$ or | JPO; | | | |
| | | US-6140230-\$ or US-6294469-\$ or | DERWENT | | | |
| | | US-5846881-\$ or US-5444018-\$ or | va . | , ; | | |
| | | US-6605533-\$ or US-6153490-\$ or | | | | |
| | | US-5970309-\$ or US-4994410-\$ or | | | . 1. | |
| 1 | | US-6650017-\$ or US-4782380-\$ or | | | 4.5 | |
| | | US-6433434-\$ or US-6043526-\$ or | | | | |
| | | US-6552431-\$ or US-6570252-\$ or | | | | |
| | | US-5229643-\$ or US-5355020-\$ or | | | 14 | |
| 180 A 1 | | US-5534716-\$ or US-5725739-\$ or | | | | |
| | | US-6016012-\$ or US-6143649-\$). | | ÷ | | |
| | | did. or (US-6208033-\$ or | | a | | |
| | | US-6217721-\$ or US-6031288-\$ or | | 1. 1. | | |
| | | US-6429493-\$ or US-5924012-\$ or | | | N . | |
| | | US-5475240-\$ or US-5386135-\$ or | in the state of th | | 4 | |
| | | US-6255151-\$ or US-5239196-\$ or | | | | |
| | | US-6221770-\$ or US-6252281-\$ or | | | | |
| | | US-5463234-\$ or US-6087727-\$ or | | * | 119 | |
| | | US-6284316-\$ or US-6143362-\$ or | | | 1: | • |
| | | US-5523626-\$ or US-5773890-\$ or | | 1,1 | | |
| | * * | US-6255216-\$ or US-6198151-\$ or | | | | |
| | | US-6320213-\$ or US-4557943-\$). | 100 | | | |
| | | did. or (US-20020060331-\$ or | And the safe | | | |
| | | US-20020043678-\$ or | | | 11.5 | |
| | - | US-20020000662-\$ or | | | | |
| ٠. | | US-20020006525-\$ or | | | 1,100 | |
| | | US-20030119246-\$ or | | | F. | |
| | | US-20010042505-\$ or | | | | |
| | | US-20020017724-\$ or | | | • | |
| | | US-20030030144-\$ or | | . , | 4 | |
| | grafings Stylen of the second | US-20020056862-\$ or | | | 1-4 | |
| | | US-20030001183-\$ or | entre en la companya de la companya de la companya de la companya de la companya de la companya de la companya | | | |
| | | US-20010006240-\$ or | | ., | | |
| | | US-20010038115-\$ or | | | 947. | |
| . * | | US-20020006716-\$ or | | | | |
| | | US-20010022369-\$ or | | | | |
| | | US-20020047153-\$ or US-20020000263-\$ or | | | | |
| | | US-20020000263-\$ or US-20010052610-\$ or | | | | |
| | | US-20020053691-\$).did. or | | | | |
| , | | | | | | |
| ., | ;. | (JP-04196419-\$ or JP-08176823-\$). did. or (JP-63284857-\$ or | | | | |
| | | JP-04196419-\$ or EP-798777-\$). | | , 140 m | | |
| * 44 | | 4:4 | Table 6 Migrael | | | All the second s |
| | 11, Ed. 9 | - ala. | ******* | | | |

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|-----|---|--|-----------|-------------|-----|------------------|
| S22 | 0 | ((US-6239492-\$ or US-5233217-\$ | US-PGPUB; | OR | OFF | 2004/09/09 16:15 |
| 3 | | or US-4985750-\$ or US-5401674-\$ | USPAT; | | | |
| | | or US-6051286-\$ or US-5644166-\$ | EPO; JPO; | | | |
| | | or US-6140230-\$ or US-6294469-\$ | DERWENT; | | | |
| 1 | | or US-5846881-\$ or US-5444018-\$ | IBM_TDB | | | |
| İ | 1 | or US-6605533-\$ or US-6153490-\$ | | | | |
| | | or US-5970309-\$ or US-4994410-\$ | | | ļ | |
| | | or US-6650017-\$ or US-4782380-\$ | | | | |
| | | or US-6433434-\$ or US-6043526-\$ | | | | |
| | | or US-6552431-\$ or US-6570252-\$ | | | | |
| | | or US-5229643-\$ or US-5355020-\$ | | | | |
| | | or US-5534716-\$ or US-5725739-\$ | | | | |
| | | or US-6016012-\$ or US-6143649-\$). | | | | |
| | | did. or (US-6208033-\$ or | | | | |
| | | US-6217721-\$ or US-6031288-\$ or | | | | |
| | | US-6429493-\$ or US-5924012-\$ or | | | | |
| | | US-5475240-\$ or US-5386135-\$ or | | | | |
| | | US-6255151-\$ or US-5239196-\$ or | | | | |
| | | US-6221770-\$ or US-6252281-\$ or | | | | |
| | | US-5463234-\$ or US-6087727-\$ or | | | | |
| | | US-6284316-\$ or US-6143362-\$ or | | | | |
| | | US-5523626-\$ or US-5773890-\$ or | | | | |
| | | US-6255216-\$ or US-6198151-\$ or | | | | |
| | | US-6320213-\$ or US-4557943-\$). | | | | |
| | | did. or (US-20020060331-\$ or | | | | |
| | | US-20020043678-\$ or | | | | |
| | | US-20020000662-\$ or | | | | |
| | | US-20020006525-\$ or | | | | |
| | | US-20030119246-\$ or | | | | |
| | | US-20030119240-\$ 07 US-20010042505-\$ or | | | | |
|] | İ | US-20020017724-\$ or | | | | |
| | | US-20030030144-\$ or | | | | |
| | | US-20020056862-\$ or | | | | |
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| | | US-20030001183-\$ or | | | | |
| | | US-20010006240-\$ or | | | | |
|] | | US-20010038115-\$ or | | | | |
| | | US-20020006716-\$ or | ļ | | | |
| | | US-20010022369-\$ or | | | | |
| | | US-20020047153-\$ or | | | | |
| | | US-20020000263-\$ or | | | | |
| | | US-20010052610-\$ or | | | | |
| | | US-20020053691-\$).did. or | | | | |
| | | (JP-04196419-\$ or JP-08176823-\$). | | | | |
| | | did. or (JP-63284857-\$ or | | | | |
| | | JP-04196419-\$ or EP-798777-\$). | | İ | | |
| | | did.) and step adj coverage.clm. | | | | |

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|------------|---|---|--|-----|---|
| S22 0 4 | ((US-6239492-\$ or US-5233217-\$ or US-4985750-\$ or US-5401674-\$ or US-6051286-\$ or US-5644166-\$ or US-6140230-\$ or US-6294469-\$ or US-5846881-\$ or US-5444018-\$ or US-6605533-\$ or US-6153490-\$ or US-6970309-\$ or US-4994410-\$ or US-6650017-\$ or US-4782380-\$ or US-6433434-\$ or US-6043526-\$ or US-6552431-\$ or US-6570252-\$ or US-6552431-\$ or US-6570252-\$ or US-5229643-\$ or US-5725739-\$ or US-6016012-\$ or US-5725739-\$ or US-6217721-\$ or US-6031288-\$ or US-6429493-\$ or US-5924012-\$ or US-6429493-\$ or US-5386135-\$ or US-6251770-\$ or US-5239196-\$ or US-6251770-\$ or US-6252281-\$ or US-6251770-\$ or US-6252281-\$ or US-6284316-\$ or US-6143362-\$ or US-6284316-\$ or US-6143362-\$ or US-625216-\$ or US-6143362-\$ or US-625216-\$ or US-6198151-\$ or US-625216-\$ or US-6198151-\$ or US-625216-\$ or US-6198151-\$ or US-620200043678-\$ or US-20020043678-\$ or US-2002000662-\$ or US-20020006525-\$ or US-2003003119246-\$ or US-20020006525-\$ or US-20030031183-\$ or US-20020006716-\$ or US-200100022369-\$ or US-200100022369-\$ or US-20020006716-\$ or US-200200077153-\$ or US-200200077153-\$ or US-200200077153-\$ or US-200200077153-\$ or US-20020006391-\$).did. or (JP-04196419-\$ or JP-08176823-\$). did. or (JP-63284857-\$ or JP-04196419-\$ or JP-08176823-\$). did. or (JP-63284857-\$ or JP-04196419-\$ or JP-08176823-\$). did. or (JP-63284857-\$ or JP-04196419-\$ or JP-08176823-\$). did. or (JP-63284857-\$ or JP-04196419-\$ or JP-08176823-\$). did. or (JP-63284857-\$ or JP-04196419-\$ or JP-08176823-\$). did. or (JP-63284857-\$ or JP-04196419-\$ or JP-08176823-\$). did. or (JP-63284857-\$ or JP-04196419-\$ or JP-08176823-\$). did. or (JP-63284857-\$ or JP-04196419-\$ or JP-08176823-\$). did. or (JP-63284857-\$ or JP-04196419-\$ or JP-08176823-\$). did. or (JP-63284857-\$ or JP-04196419-\$ or JP-08176823-\$). did. or (JP-63284857-\$ or JP-04196419-\$ or JP-08176823-\$). did. or (JP-63284857-\$ or JP-04196419-\$ or JP-08176823-\$). did. or (JP-63284857-\$ or JP-04196419-\$ or JP-08176823-\$). did. or (JP-63284857-\$ or JP-04196419-\$ or JP-08176823-\$). | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 16:15 |
| S22 2 | and the second s | US-PGPUB: | OR | ON: | 2004/09/09 16:18 |
| F | | USPAT; EPO; JPO; | | | 4, 4, 5, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, |
| | | DERWENT; IBM_TDB | ************************************** | | |
| S22 3 6 | step adj coverage near10 "9"\$1 adj (percent "%") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/09/09 16:37 |

| S22 7 | 27 | seed adj layer near12 zinc and titanium | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2004/09/09 17:28 |
|----------|--|--|---|----|-----|------------------|
| S22 8 | 2 | ("6143362").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 17:29 |
| S22 9 | 2 | ("6284316").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 17:30 |
| S23 0 | 0 | ("940980.ap.").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 17:30 |
| S23 1 | 4 | "940980".ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 17:32 |
| S23 2 | 5 | "940917".ap. | US-PGPUB; USPAT; | OR | OFF | 2004/09/09 17:53 |
| | Part of the second of the seco | | EPO; JPO; DERWENT; IBM_TDB | | | |
| S23 3 | 5 | "941123".ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 17:53 |
| S23 4 | 5380 | 257/296.ccls. 257/297.ccls. 257/298.ccls. 257/299.ccls. 257/30\$1.ccls. 257/311.ccls. 257/312.ccls. 257/313.ccls. | US-PGPUB; USPAT | OR | OFF | 2004/09/09 18:42 |
| S23 5 | 2471 | 257/734.ccls. 257/754.ccls. 257/755.ccls. 257/757.ccls. 257/764.ccls. 257/770.ccls. 257/771.ccls. | US-PGPUB; USPAT | OR | OFF | 2004/09/09 18:44 |

| S23 6 | 7775 | (257/296.ccls. 257/297.ccls. 257/298.ccls. 257/299.ccls. | US-PGPUB; USPAT | OR | OFF | 2004/09/09 18:44 |
|----------|------|--|---|----|-----|------------------|
| | | 257/30\$1.ccls. 257/311.ccls. 257/312.ccls. 257/313.ccls.) or (257/734.ccls. 257/754.ccls. 257/755.ccls. 257/757.ccls. 257/764.ccls. 257/770.ccls. 257/771.ccls.) | | , | | |
| S23 7 | 7775 | ((257/296.ccls. 257/297.ccls. 257/298.ccls. 257/299.ccls. 257/30\$1.ccls. 257/311.ccls. 257/312.ccls. 257/754.ccls. 257/755.ccls. 257/757.ccls. | US-PGPUB; USPAT | OR | OFF | 2004/09/09 18:45 |
| | | 257/764.ccls. 257/770.ccls. 257/771.ccls.)) or 437/190.ccls. | | | | |
| S23 8 | 2 | ("5401674").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/09 18:45 |
| S23 9 | 1060 | 257/e21.165 | US-PGPUB; USPAT | OR | OFF | 2004/09/09 18:46 |
| S24 0 | 1060 | (("5401674").PN.) 257/e21.165 | US-PGPUB; USPAT | OR | OFF | 2004/09/09 18:46 |
| S24 1 | 8685 | (((257/296.ccls. 257/297.ccls. 257/298.ccls. 257/299.ccls. 257/30\$1.ccls. 257/311.ccls. | US-PGPUB; USPAT | OR | OFF | 2004/09/09 18:47 |
| | | 257/312.ccls. 257/313.ccls.) or (257/734.ccls. 257/754.ccls. 257/755.ccls. 257/757.ccls. 257/764.ccls. 257/770.ccls. 257/771.ccls.)) or 437/190.ccls.) 257/e21.165 | | | | |
| S24 2 | 3 | ((((257/296.ccls. 257/297.ccls. 257/298.ccls. 257/299.ccls. 257/30\$1.ccls. 257/311.ccls. 257/312.ccls. 257/313.ccls.) or (257/734.ccls. 257/754.ccls. 257/755.ccls. 257/757.ccls. 257/764.ccls. 257/760.ccls. 257/760.ccls. 257/770.ccls. 257/771.ccls.)) or 437/190.ccls.) 257/e21.165) and titanium adj silicide and titanium near6 zinc and seed adj layer and contact | US-PGPUB; USPAT | OR | OFF | 2004/09/09 18:48 |

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|-----------|----|--|---|----|-----|------------------|
| S24 3 | 6 | (((((257/296.ccls. 257/297.ccls. 257/298.ccls. 257/299.ccls. 257/30\$1.ccls. 257/311.ccls. 257/312.ccls. 257/313.ccls.) or (257/734.ccls. 257/754.ccls. 257/755.ccls. 257/757.ccls. 257/764.ccls. 257/770.ccls. 257/771.ccls.)) or 437/190.ccls.) 257/e21.165) and titanium adj silicide and titanium near6 zinc and contact | US-PGPUB; USPAT | OR | OFF | 2004/09/09 18:48 |
| \$24 4 | 61 | step adj coverage near4 (percent "%") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/11 11:03 |
| S24 5 | 32 | step adj coverage near4 (percent "%") and titanium | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/11 11:03 |
| S24 6 | | step adj coverage near4 (percent "%") and titanium and reflow | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/11 11:05 |
| S24 7 | 1 | step adj coverage near4 (percent "%") and titanium and (reflow reflowing) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/11 11:05 |
| S24 8 | 20 | step adj coverage near4 (percent "%") and titanium and barrier | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/11 11:14 |
| S24 9 | 3 | step adj coverage near4 (percent "%") and titanium adj silicide and titanium and barrier | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/11 11:18 |
| S25 0 | 3 | step adj coverage near4 (percent "%") and titanium adj silicide and titanium and barrier and (MOSFET MISFET MOS adj transistor field effect adj transistor IGBT insulated adj gate gate) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/11 11:20 |
| S25 1 | 1 | step adj coverage near4 (percent "%") and titanium adj silicide and titanium and barrier and (MOSFET MISFET MOS adj transistor field adj effect adj transistor IGBT insulated adj gate gate) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/11 11:25 |

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|-----------|-----|---|---|--------------|-----|---|
| S25 2 | 1 | step adj coverage near4 (percent "%") and titanium adj silicide and titanium and barrier and (MOSFET MISFET MOS adj transistor field adj effect adj transistor IGBT insulated adj gate gate transistor) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/11 11:41 |
| S25 3 | 0 | titanium adj aluminide and MOSFET and step adj coverage and memory | US-PGPUB; USPAT; EPO; JPO; | OR | OFF | 2004/09/11 11:42 |
| | | | DERWENT; IBM_TDB | | | San Tight San San San San San San San San San San |
| S25 4 | 2 | titanium adj aluminide and MOSFET | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2004/09/11 11:42 |
| S26 8 | 5 | "941123".ap. | US-PGPUB; USPAT; | OR | OFF | 2005/01/21 08:17 |
| | | | EPO; JPO; DERWENT; IBM_TDB | | | |
| \$26 9 | 2 | ("6433434").PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/01/21 06:31 |
| S27 0 | 5 | "030705".ap. | US-PGPUB; USPAT; | OR | OFF | 2005/01/21 06:32 |
| ā, 1 | | | EPO; JPO; DERWENT; | e e | | |
| - | ų Š | | IBM_TDB | | | |
| S27 1 | | "940917".ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/01/21 06:33 |